3-750-280-21(1)

SONY

A

FM Stereo/FM-AM Receiver

Operating Instructions

~~STR-GX6ESII~~
~~STR-GX7ESII~~

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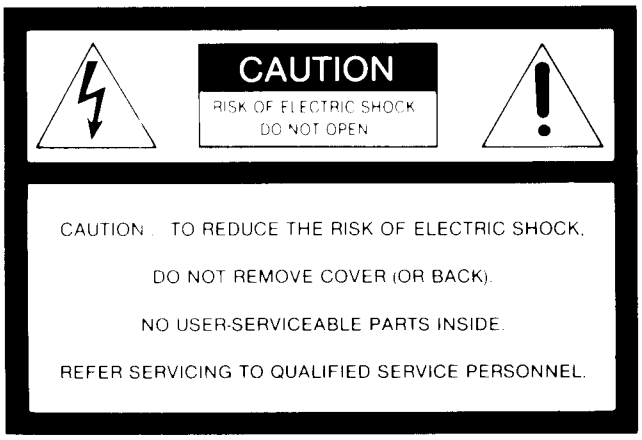
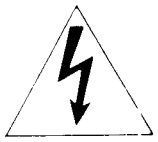
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Owner's Record

The model and serial numbers are located at the rear. Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

This instruction manual covers the STR-GX6ESII and STR-GX7ESII.
The differences between these models are shown in the table below.

	STR-GX6ESII	STR-GX7ESII
VIDEO 3 input jacks and VIDEO 3 input selector	Not equipped	Equipped
PRE OUT jacks	Not equipped	Equipped
S VIDEO jacks	Not equipped	Equipped
Power output	100 W	120 W

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Features

The STR-GX6ESII or STR-GX7ESII is a receiver which controls audio and video signals. The unit allows you to switch easily among a variety of audio/video programs.

TV/video programs
- A variety of audio program sources can be added to a video tape during tape editing.

Tuner
- Precise tuning is obtained thanks to the quartz-locked digital synthesizer system.
- A total of 20 FM/AM stations can be preset.

Remote commander
- The programmable remote commander allows you to control most of Sony's audio and video equipment from a distance. It is also equipped with an infrared ray transmitter/receiver which allows it to "read" and "store" control information from other remote commanders. This includes the commander produced by manufacturers other than Sony.

General
- These receivers have a spontaneous twin drive power circuit. Condensers having large capacity are used for the voltage amplification drive stage of class A and power output stage of class B. Thus, a stable output and high quality sound are obtained, resulting in exclusion of power interferences.
  The class A stage realizes a stable operation free from interference of the power stage even when an instantaneous or strong output is received.
- A source direct switch is employed to reproduce high fidelity sound.
  Any source can be reproduced without passing through the circuits of tone control, loudness switch and balance control.

Precautions

On safety
- Operate the unit only on 120 V AC, 60 Hz.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before oparating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.

On operation
- Before making program source connections, be sure to turn the power switch off and unplug the unit.
- When the unit is not used, turn the power off, to conserve energy and to extend the useful life of your unit.

On cleaning the cabinet
Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzine.

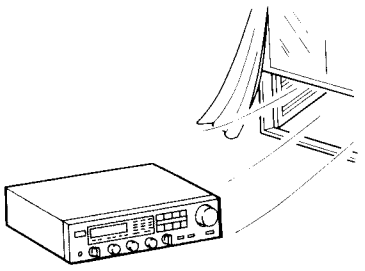
For detailed safety precautions, see the "IMPORTANT SAFEGUARDS" leaflet.
If you have any question or problem concerting your unit, please consult your nearest Sony dealer.

Installing

Notes on Installation

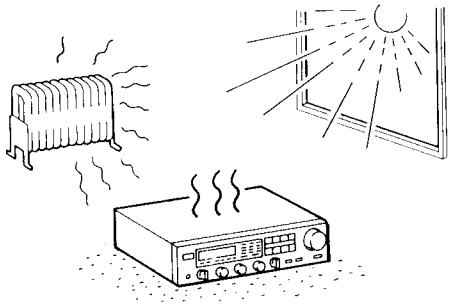
Place the unit in a location with adequate air circulation to prevent internal heat build-up in the unit.

This way



Do not install the unit:
— near heat sources such as radiators or air ducts.
— in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

Not this way

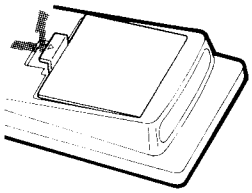


Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.

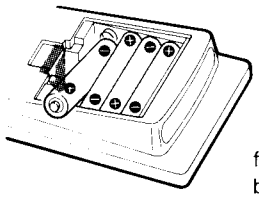
Installing Batteries

Before operating the remote commander install the batteries as shown.

1



2



four size AA (R6) batteries

Do not throw away the carton and packing material!
It will be an ideal container when transporting the system for repair work, etc.

To avoid damage caused by battery leakage and corrosion
When the commander will not be used for a long time, remove the batteries.

On battery life
About half a year of normal operation can be expected when using Sony SUM-3(NS) batteries.
When the batteries are run down, the remote commander will not operate the unit. In this case, replace batteries with new ones.

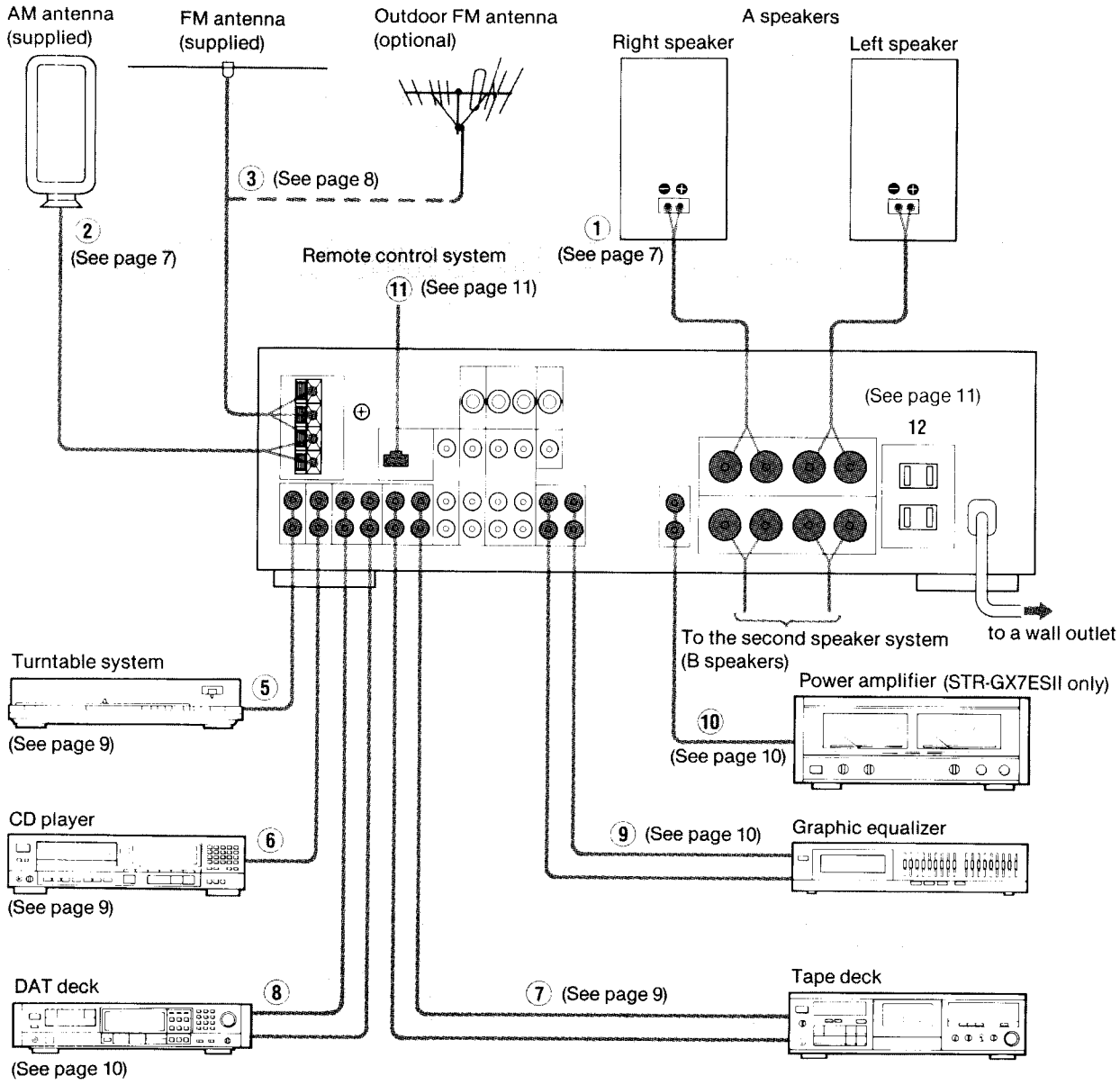
Connecting the System

Notes on Connection

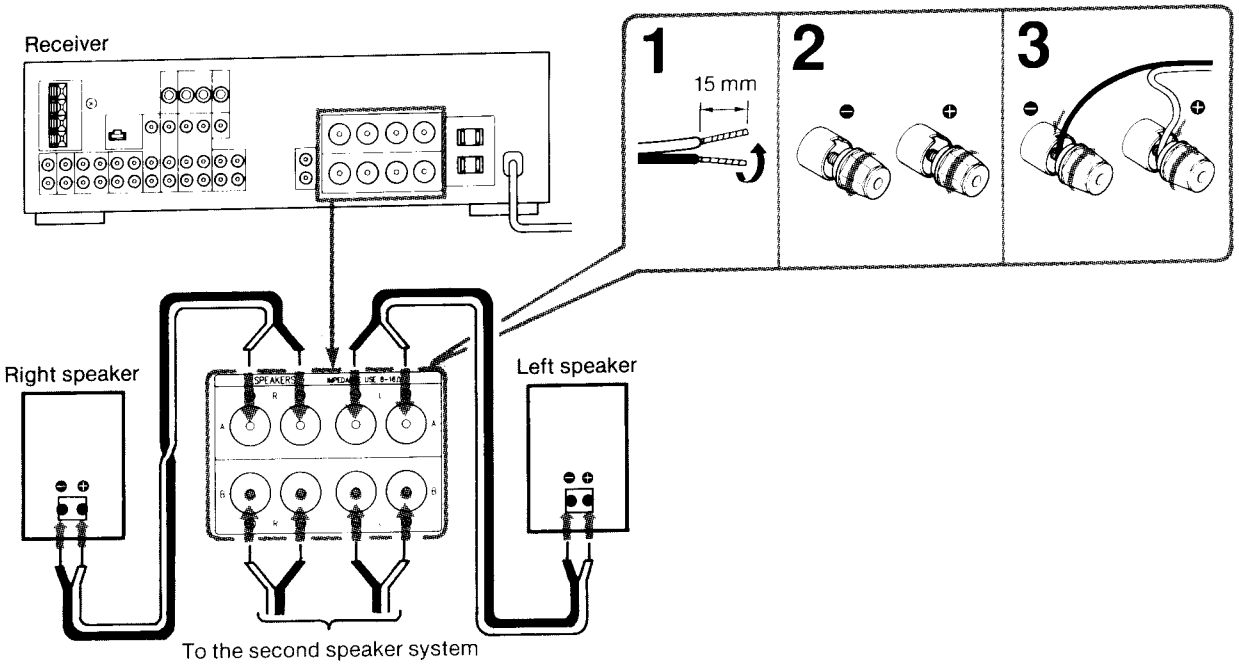
- The power cord should be connected last of all, after making sure that the SYSTEM POWER switch is turned off.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.
- Cord plugs and jacks are color coded. The red plugs and jacks are to be connected to the right-channel(R) and white ones to the left-channel(L).

Audio Connection Diagram

The circled numbers correspond to the individual connecting diagram.



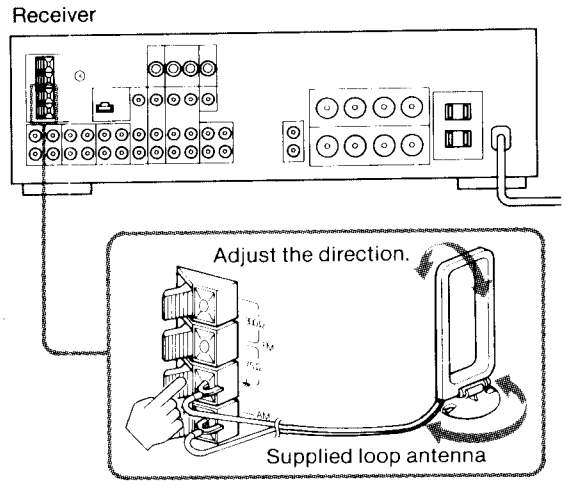
① Connecting the Speakers



Note
Once the speakers have been connected, move SPEAKERS selector (on the front panel) to A, B or A + B setting.
When using the headphones, set the SPEAKERS selector to OFF.

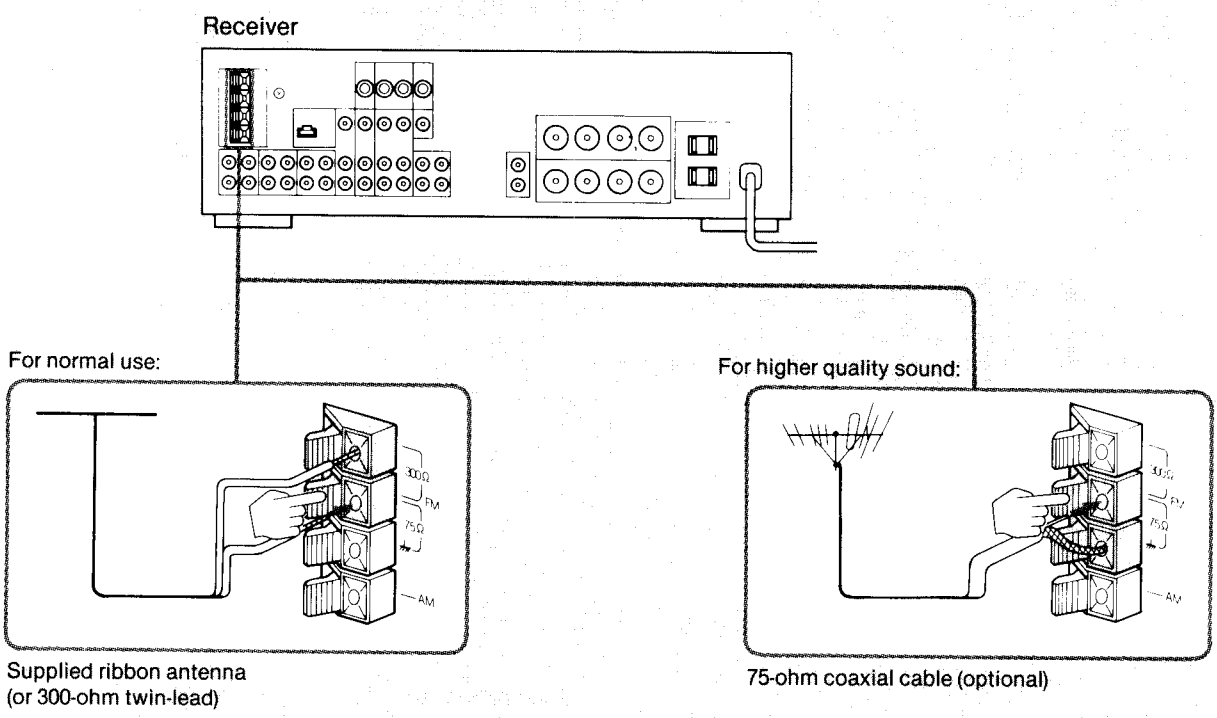
Speaker impedance and power capability
This receiver is designed to work best with speakers having nominal impedance from 8 to 16 ohms at rated 100 watts (STR-GX6ESII) or 120 watts (STR-GX7ESII) RMS per channel with an 8 ohms load from 20 – 20,000Hz.

② Connecting the AM Antenna



For areas with difficult AM reception
In areas with troubled reception, connect a 6- to 15-meter (20 -to 50-foot) insulated wire to the AM antenna terminal.
Extend this out of doors if possible, keeping the greater portion horizontal.
(There is no need to disconnect the supplied antenna.)

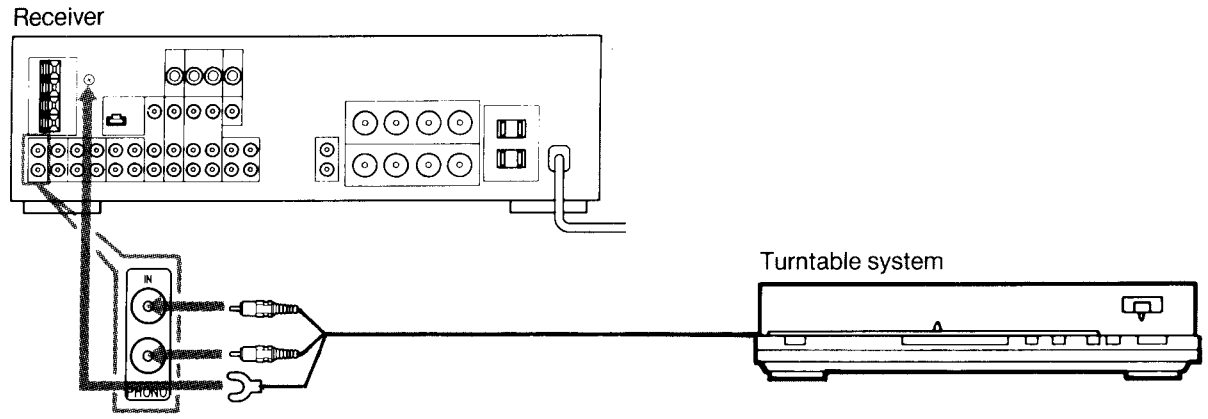
3 Connecting the FM Antenna



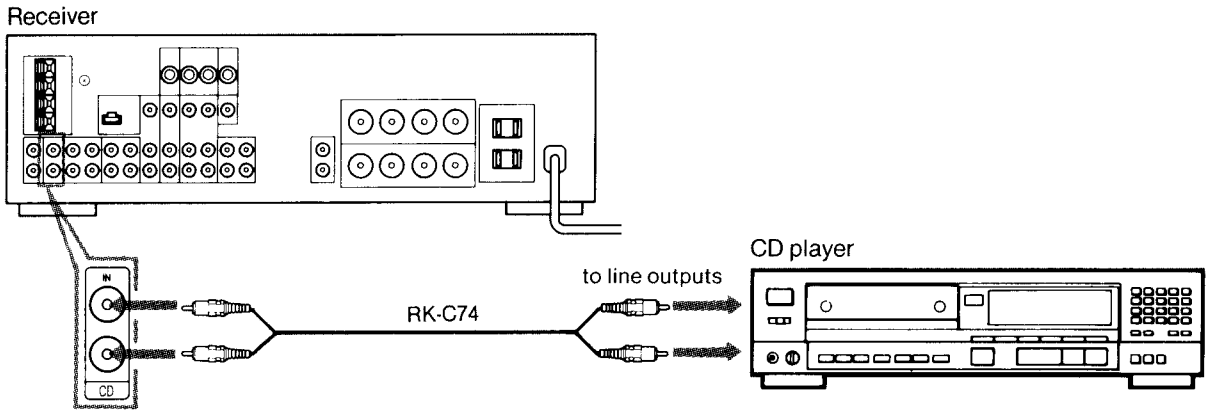
4 Connecting the Antenna Ground

To prevent hum, connect the ground wire to ANTENNA ground terminal (⏚).
When an outdoor antenna is installed, be sure to connect the ground wire for lightning protection.

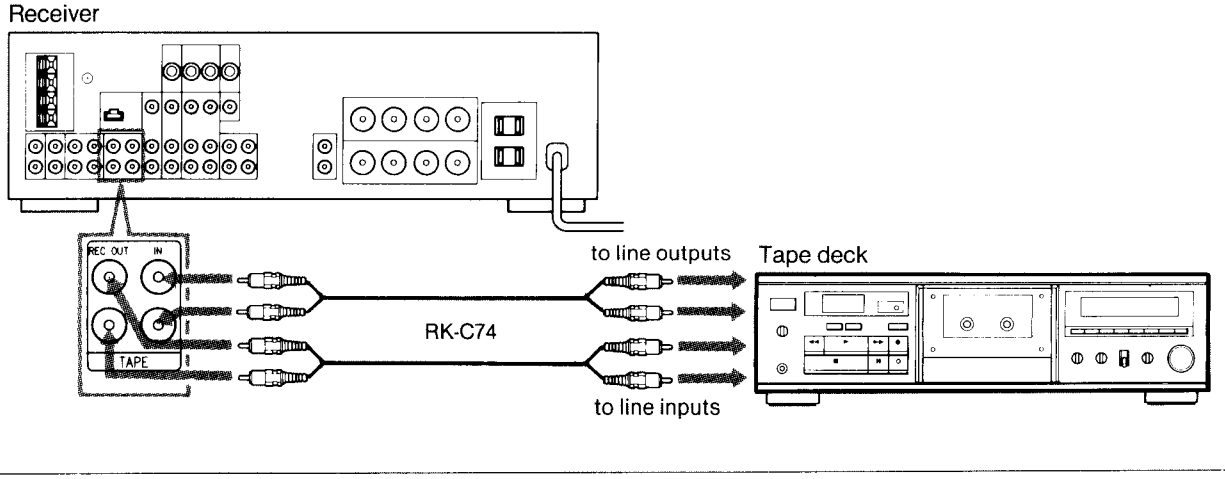
⑤ Connecting a Turntable System



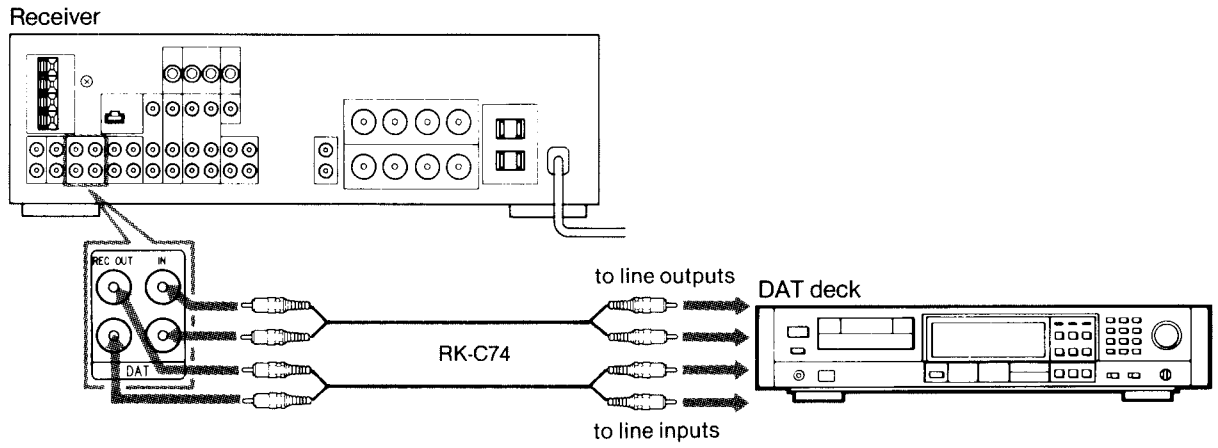
⑥ Connecting a CD Player



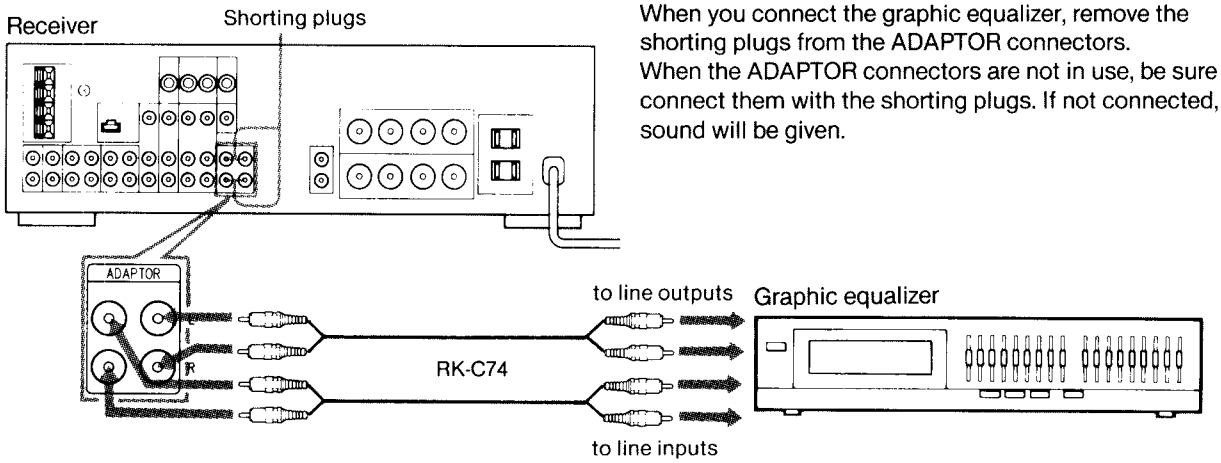
⑦ Connecting a Tape Deck



⑧ Connecting a DAT (Digital Audio Tape) Deck

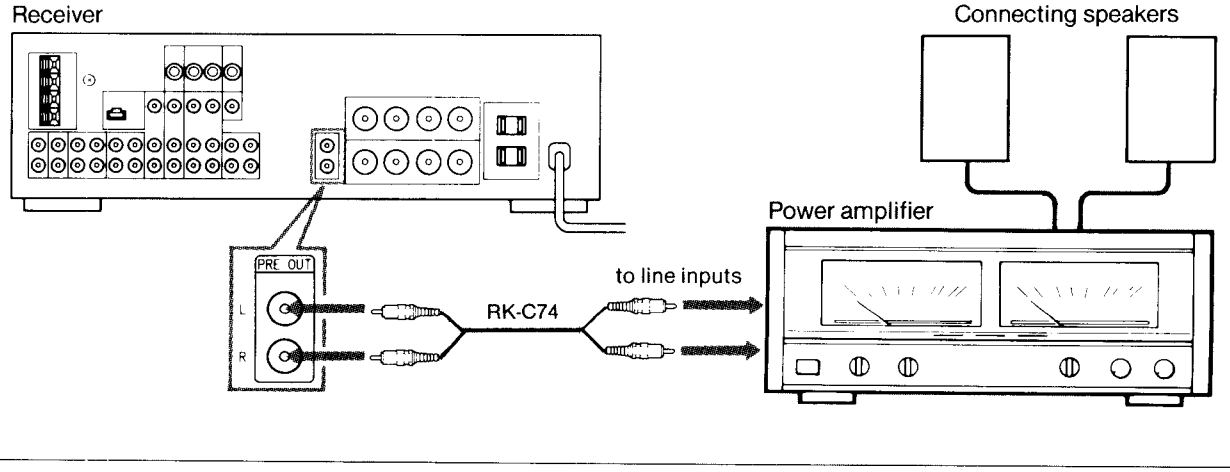


⑨ Connecting a Graphic Equalizer



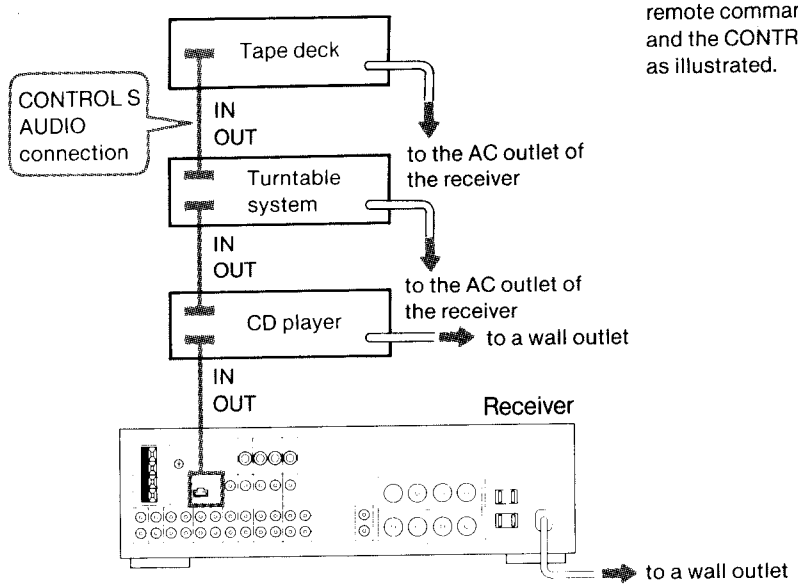
When you connect the graphic equalizer, remove the shorting plugs from the ADAPTOR connectors.
When the ADAPTOR connectors are not in use, be sure to connect them with the shorting plugs. If not connected, no sound will be given.

⑩ Connecting a Power Amplifier (STR-GX7ESII only)



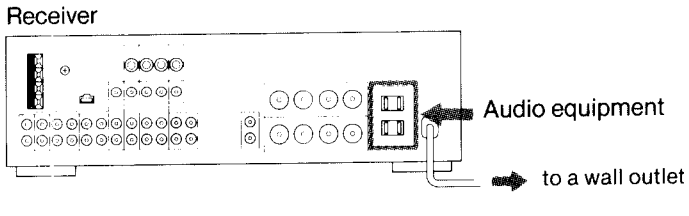
⑪ Connecting the Remote Control System

Connection example



To control the equipment connected to the receiver with the remote commander, connect the CONTROL S OUT connector and the CONTROL S IN connector of each piece of equipment as illustrated.

⑫ Connecting the AC Power



Connect the AC power cord of each piece of equipment to the AC outlet on the receiver so that you can turn the equipment on and off using the receiver's SYSTEM POWER switch.

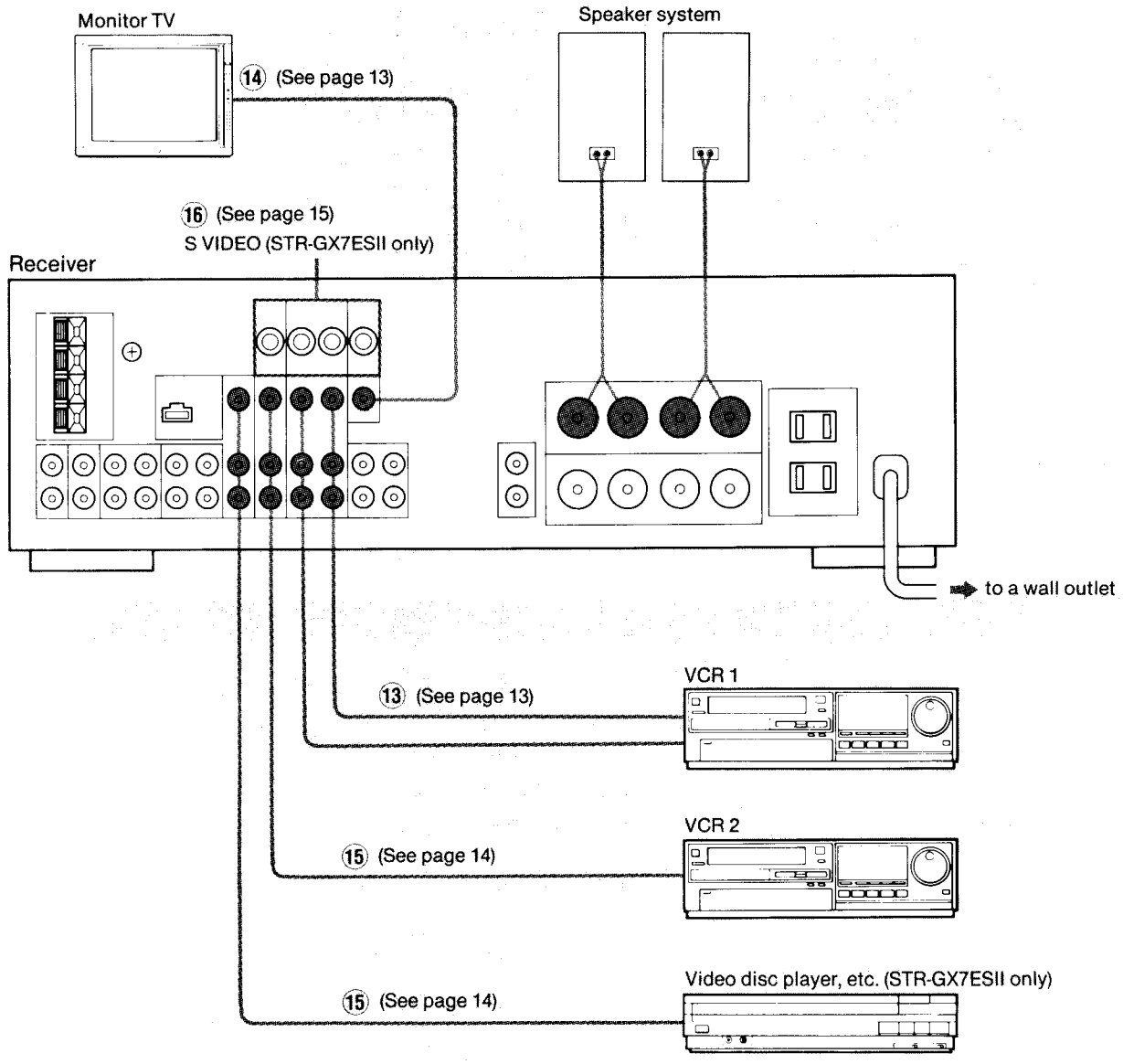
Caution

Be careful that the total power consumption of each piece of equipment connected to the outlets on the receiver does not exceed 100 watts.

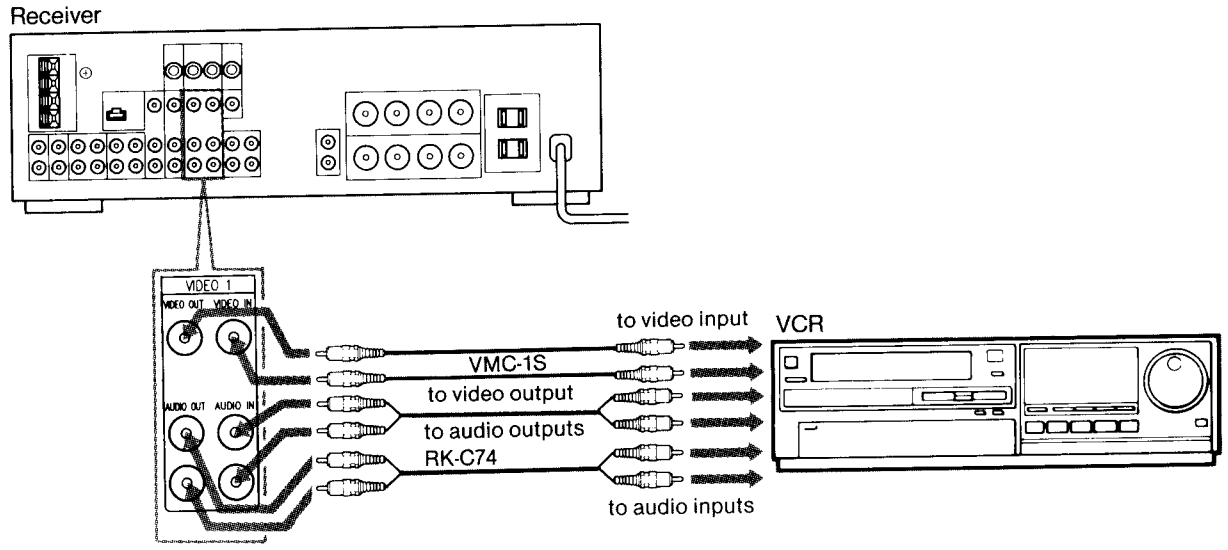
Do not connect electrical home appliances such as an electric iron, fan, TV, or other high-wattage equipment to these outlets.

VCR and TV Connection Diagram

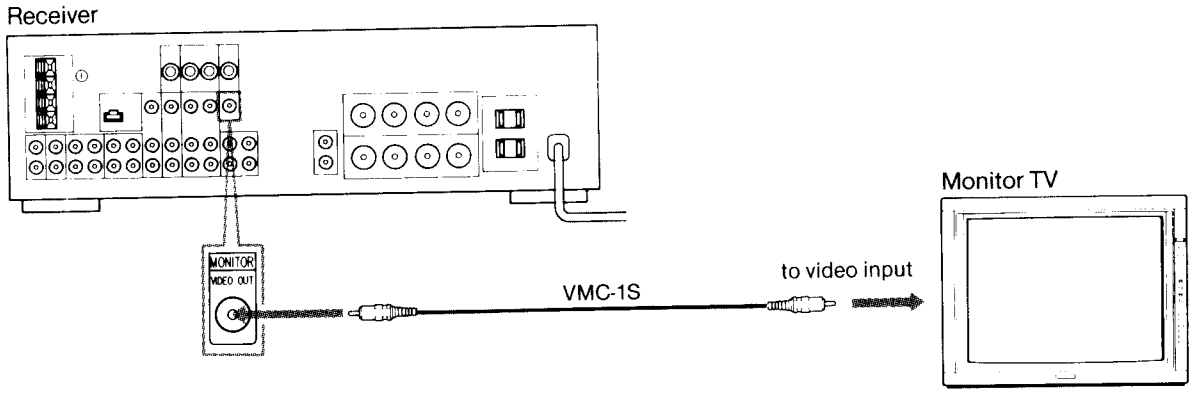
The circled numbers correspond to the individual connection diagram.



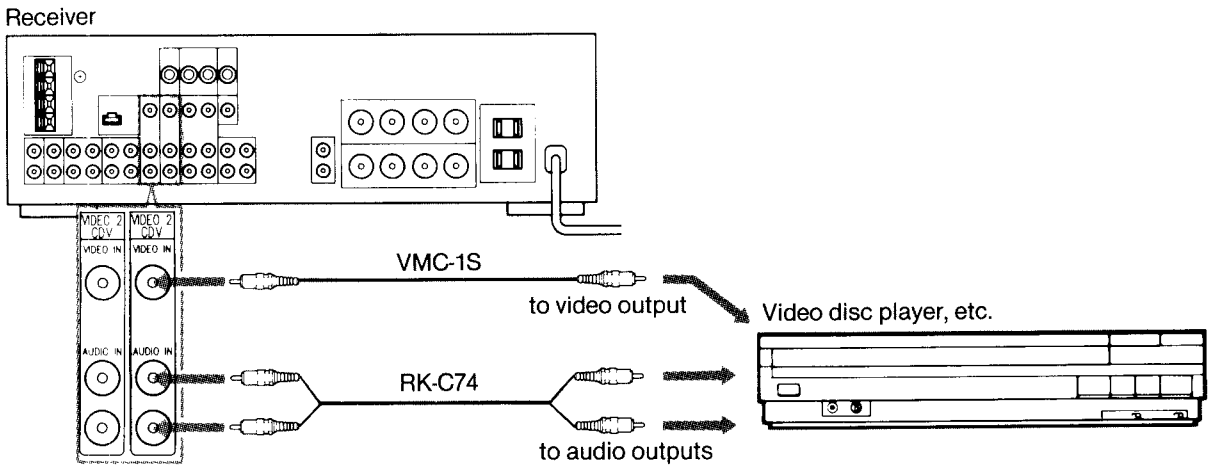
⑬ Connecting a VCR



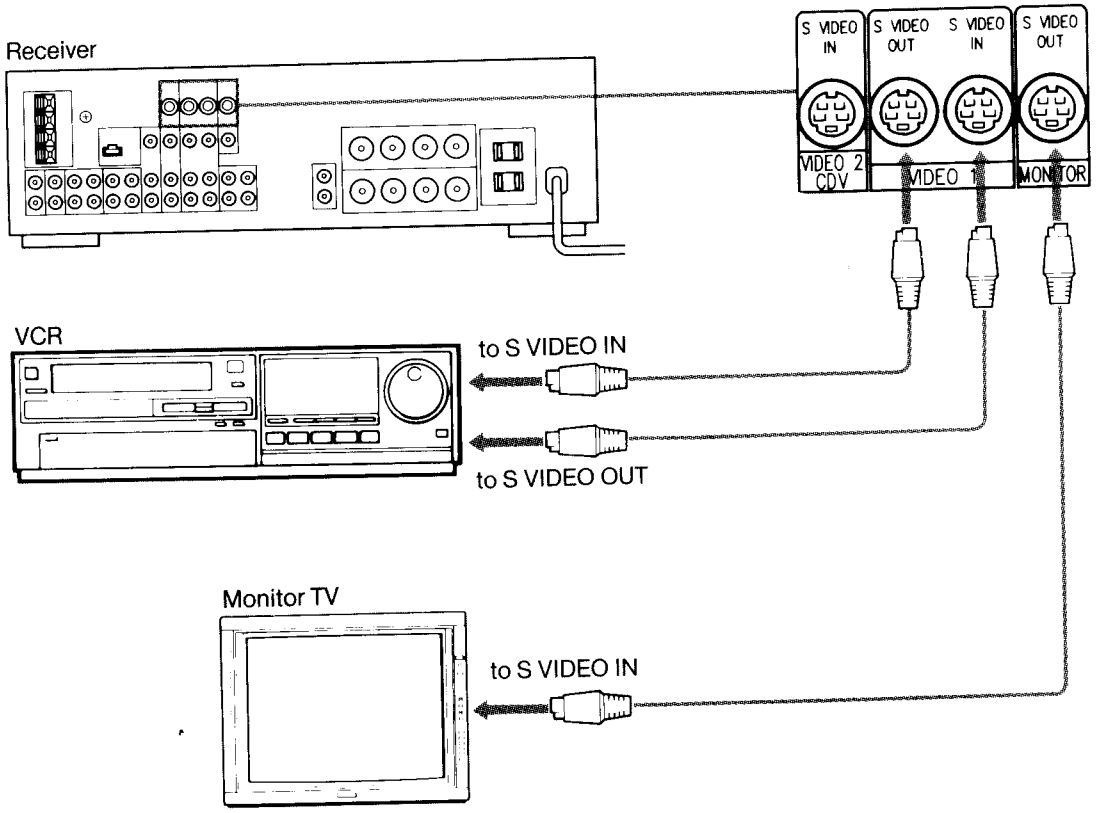
⑭ Connecting a Monitor TV



⑮ Connecting a video disc player, TV tuner, etc.

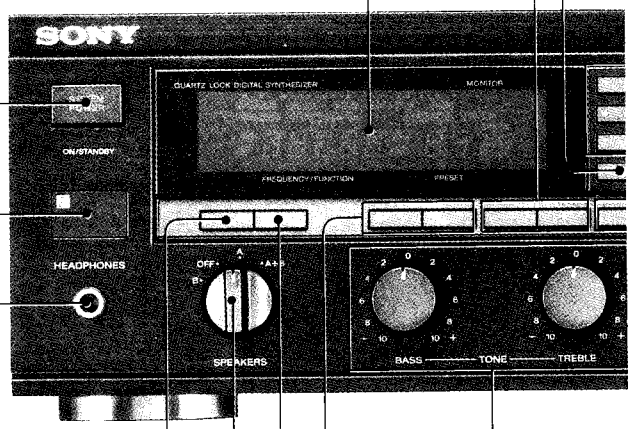


16 Connecting a VCR, Monitor TV, and other equipment with the Connectors for Component Video Signal of the Luminance and the Chrominance (STR-GX7ESII only)



Use commercially available connecting cord appropriate for your equipment.

Parts Identification



MEMORY button (Page 22)

TUNING buttons (Page 21)

Display window

SYSTEM POWER switch

Remote control sensor

HEADPHONES jack
(stereo phone jack)

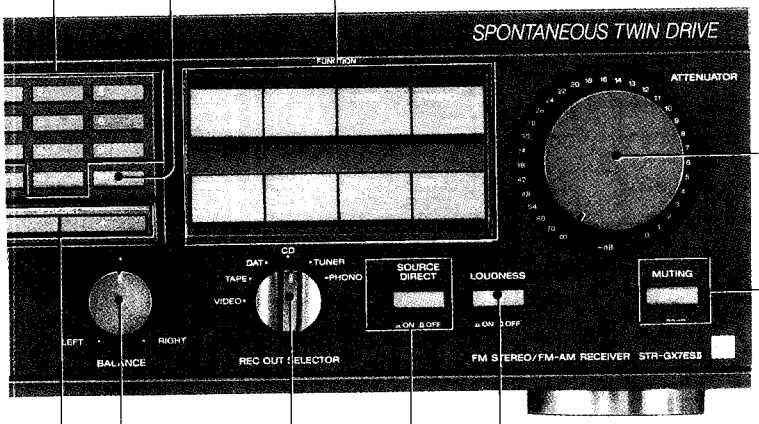
FM MODE button (Page 22)

SPEAKERS selector

AUTO/MAN
(automatic/manual tuning mode) selector (Page 21)

BAND selectors (Page 21)

BASS and TREBLE
tone controls (Page 20)



Numeric buttons (Page 22)

ENTER button (Page 22)

FUNCTION selectors
(Page 21 or 24)

ATTENUATOR knob and indicator
(Page 20)

MUTING switch and indicator (Page 20)

LOUDNESS switch (Page 20)

SOURCE DIRECT switch and indicator
(Page 20)

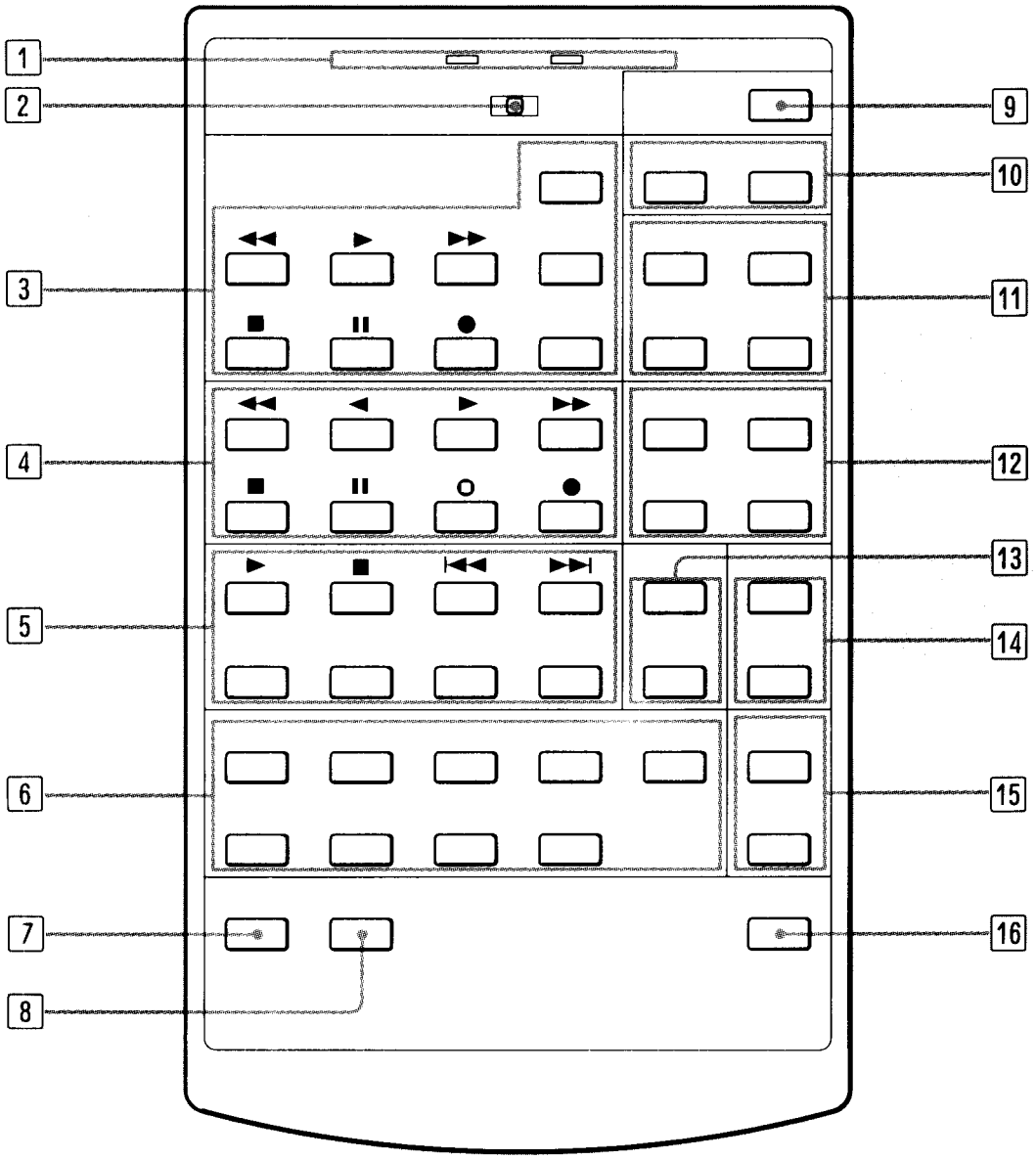
REC OUT SELECTOR
(Recording output selector) (Page 25)

BALANCE control (Page 20)

PRESET buttons (Page 23)

RM-P103 Programmable commander

The RM-P103 Programmable System Commander can learn various functions of other remote commanders emitting infrared rays.
When it is set to SONY STD (Sony Standard) by the mode selector, its buttons can be used to perform the functions below.



The following functions are available with the mode switch set to SONY STD.

1 LEARNED and READY indicators (See page 28)

2 LEARN/USER STD./SONY STD. selector (See page 28)

3 VTR buttons
TV/VTR: Selects the signal to be output from the VCR, either a TV signal or VCR programs.
◀◀: Rewind
▶: Play
▶▶: Fast forward
■: Stop
❚❚: Pause
●: Recording (While pressing ●, press ▶)
VTR CH: Selects the VCR channel.
If your VCR has a command mode selector
When the command mode selector is set to VTR 1, you should set the LEARN/USER STD./SONY STD. selector to SONY STD.
When the command mode selector is set to VTR 2, you should set the LEARN/USER STD./SONY STD. selector to USER STD.

4 TAPE buttons
◀◀: Reverse fast winding
◀: Reverse play
▶: Forward play
▶▶: Forward fast winding
■: Stop
❚❚: Pause
O: Record muting
●: Recording (while pressing ●, press ◀ or ▶)

Note: If your tape deck is a double-deck type, refer to its instruction manual concerning the deck which can be controlled with this commander. When both decks can be controlled with the commander, either of the two decks can be controlled with the mode selector set to SONY STD. The other deck can be controlled with the mode selector set to USER STD.

5 CD buttons
▶: Starts play
■: Stops play
⏮/⏭: AMS (Automatic Music Sensor) buttons
PGM: Program play
SHUFFLE: Shuffle play
D. SELECT: Disc select (for a CD player equipped with disc changer)
REPEAT: Repeat play.

6 Function selectors

7 SOURCE DIRECT button
This button does not operate.

8 ADAPTOR button
This button does not operate.

9 POWER ON/OFF button
Turns the power of the receiver on or off.

10 VTR and TV POWER ON/OFF buttons
TV: Turns the power of the TV on or off.
VTR: Turns the power of the VCR on or off.

11 TV buttons
VOL: Adjusts the sound level of the TV.
CH: Selects the channel to be received by the TV.

12 Free buttons
Functions of other remote commanders can be learned on these buttons. (See "How to Use the Learning Function," pages 28 – 29.)

13 PHONO buttons
START: Starts record playing.
STOP: Stops record playing.

14 TUNER PRESET CH buttons
+: Selects a higher preset number.
–: Selects a lower preset number.

15 VOLUME control buttons
Adjusts the volume of the sound.

16 MUTING button

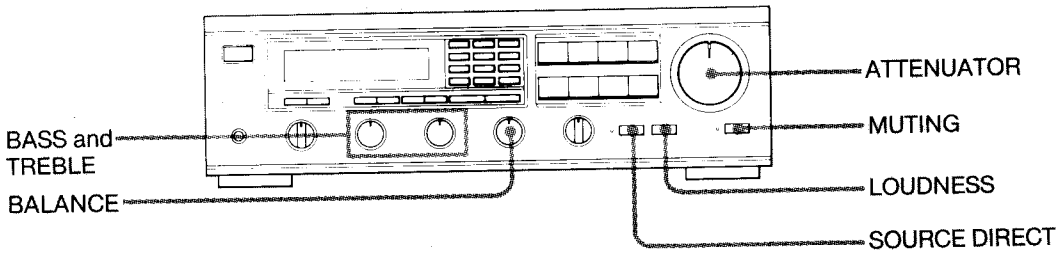
Notes

- SHUFFLE and PGM modes of some CD players cannot be cleared by this remote commander. In such cases, clear the modes using the CD player itself or with the remote commander supplied with the CD player.
- When the CONTROL S OUT connector is connected to the CONTROL S IN connector of each piece of equipment, you can control the connected equipment using this remote commander (See page 11).

Note on the ● (recording) button under 3 VTR buttons
If your VCR is of such type as pressing ● puts it in REC PAUSE mode, first press ● on this commander and then ❚❚.

Audio Adjustment

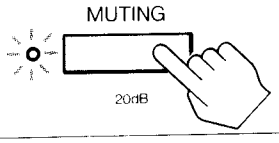
For getting the optimum sound, you can adjust volume and sound quality using the functions below.



Volume adjustment

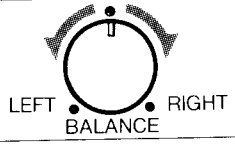
To adjust volume

To reduce the sound to a low level temporarily (–20 dB ATT)
Press MUTING.
Press again to restore the same listening level as before.



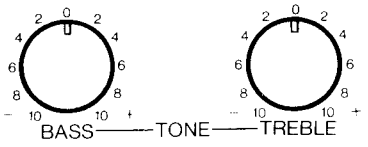
Balance adjustment

To change the relative strength of the right and left speaker output
Adjust BALANCE to correct stereo imaging, when the speaker position is not symmetrical.

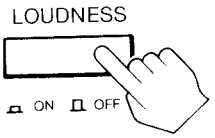


Sound quality adjustment

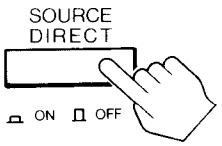
To adjust the tone quality
Adjust BASS or TREBLE for the optimum sound.



To reinforce the bass and high frequency response
Press LOUDNESS.
The lower the speaker output level is, the more bass and high frequency sound is emphasized.

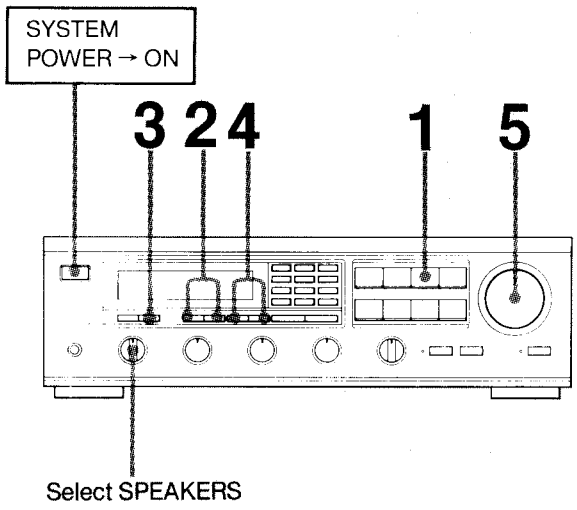


To bypass the tone control circuit
Press SOURCE DIRECT.
BASS and TREBLE tone controls, BALANCE control and LOUDNESS are bypassed.



Receiving FM/AM Broadcasts

Tuning in an FM/AM Station Manually—Manual Tuning



When you do not know the frequency of an FM/AM station, proceed as follows:

1 **Press TUNER.**

2 **Select FM or AM.**

3 When AUTO indicator appears, **press AUTO/MAN.** (AUTO indicator disappears.)

4 **Press "+" or "–" TUNING.**
"+": Frequency ascends.
"–": Frequency descends.
Each time "+" or "–" is pressed, the frequency will change by 0.1 MHz at FM, 10 kHz at AM. To change the frequency continuously, keep the button pressed.

5 **Adjust the volume.**

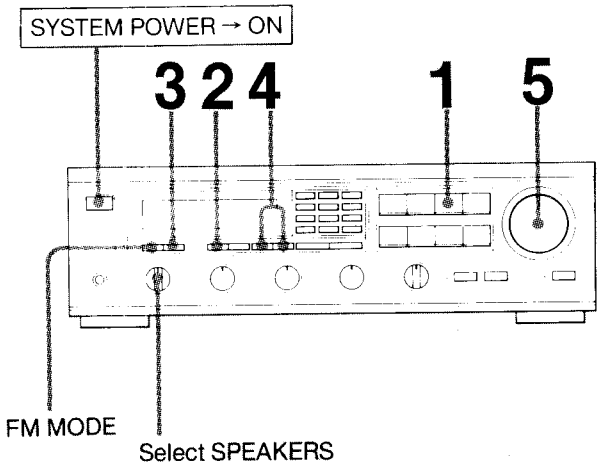
Changing the AM tuning interval
The AM tuning interval is preset to 10 kHz. To use the receiver where the frequency allocation system is based on a 9 kHz interval, make the following adjustments.

1 Turn on the power and tune in any AM station.
2 Turn off the power.
3 Press SYSTEM POWER while pressing the "+" TUNING button.

To reset the AM tuning interval, repeat the above steps.

Caution
When the interval is changed, all preset stations which you have memorized will be erased. After changing the interval, be sure to preset the stations again.

Tuning in an FM Station Automatically—Automatic Tuning



1 **Press TUNER.**

2 **Press FM.**

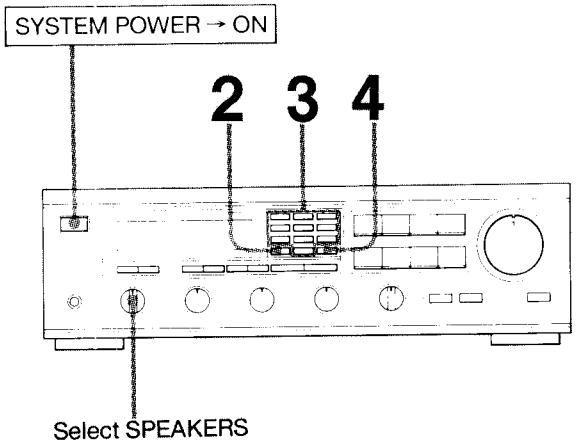
3 **Press AUTO/MAN.**
(AUTO indicator appears.)

4 **Press "+" or "–" TUNING.**
"+": Starts frequency-ascending sweep.
"–": Starts frequency-descending sweep.
When a station is received, automatic tuning automatically stops.

5 **Adjust the volume.**

Memorizing a Station

A total of 20 FM/AM stations can be memorized in any desired sequence.



1 **Tune in the desired station.** (See "Manual Tuning" or "Automatic Tuning".)

2 **Press MEMORY.**
MEMORY indicator appears for a few seconds.

3 **Press the desired numeric button (1 to 20), while the MEMORY indicator is displayed.**

4 **Press ENTER.**

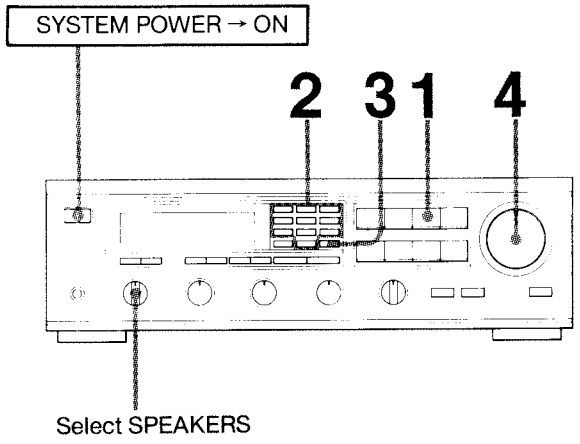
When sweeping does not stop at the desired station
The signal strength is weak.
To stop sweeping, press AUTO/MAN again. AUTO indicator disappears and automatic tuning stops.
Then tune in the station as described in "Manual Tuning".

When an FM stereo program is noisy or hard to receive
Press FM MODE. The STEREO indicator goes out (the sound is heard in monaural, but the reception will be improved). To return to the stereo mode, press the button again or tune in another station.

Replacing a preset station
Preset another station on the number of the station to be replaced. The previously preset station will be erased.

Tuning in a Preset Station

Method A



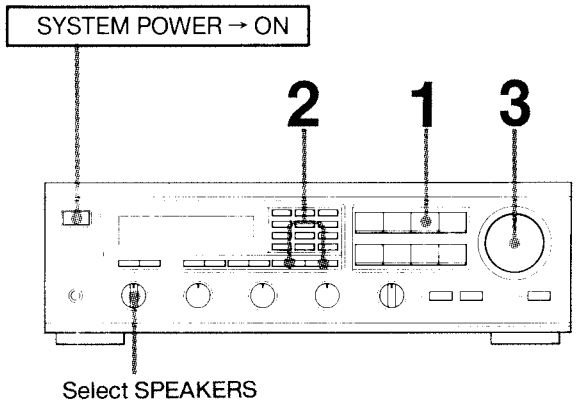
1 **Press TUNER.**

2 **Press the preset numeric button.**

3 **Press ENTER.**

4 **Adjust the volume.**

Method B



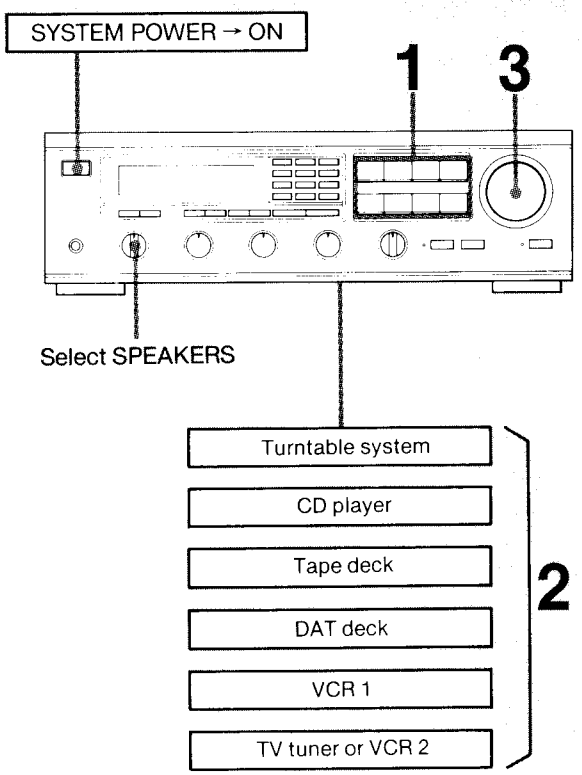
1 **Press TUNER.**

2 **Press "+" or "–" PRESET.**
Each time you press "+" (or "–"), the preset station of the next higher (or lower) number is tuned in.

3 **Adjust the volume.**

Note on Method B
If you keep pressing "+" (or "–"), preset stations are successively tuned in in the increasing (or decreasing) order of number. Release the button when the desired preset station is tuned in.

Listening to Program Sources Other than Broadcasts



1 Select the program source.

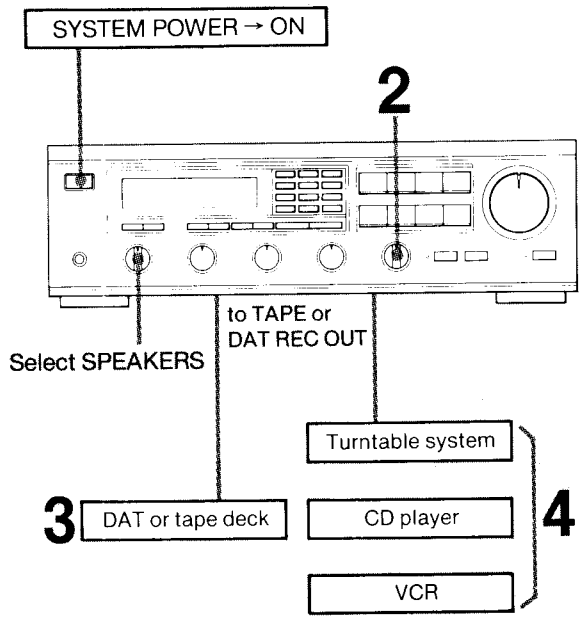
	FUNCTION
Phono record	PHONO
Compact disc	CD
Video programs	VIDEO 1,2/CDV (STR-GX6ESII) VIDEO 1,2/CDV,3 (STR-GX7ESII)
Taped programs	TAPE
DAT programs	DAT

2 Start the program.

3 Adjust the volume.

Recording on an Audio Tape

Recording



1 **Turn on the receiver and the equipment to be used.**

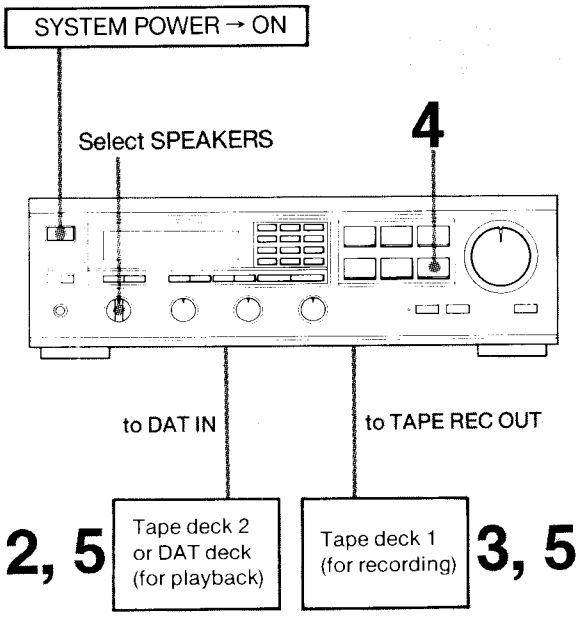
2 **Select the desired program source with REC OUT SELECTOR.**
For an FM/AM broadcast, tune in the desired station.

3 **Set the DAT or tape deck in the recording mode.**

4 **Start the desired program source.**

You can listen to another program source without affecting the recording by pressing FUNCTION selector.

Tape Dubbing



You can listen to any program source during dubbing by pressing FUNCTION selector.

1 **Turn on the receiver and the equipment to be used.**

2 **Insert the recorded tape into tape deck 2 (or a DAT deck).**

3 **Insert a blank tape into tape deck 1 and adjust the recording level.**

4 **Select DAT with REC OUT SELECTOR.**

5 **Start the playback of tape deck 2 (or the DAT deck) and set tape deck 1 in the recording mode.**

Dubbing will start.

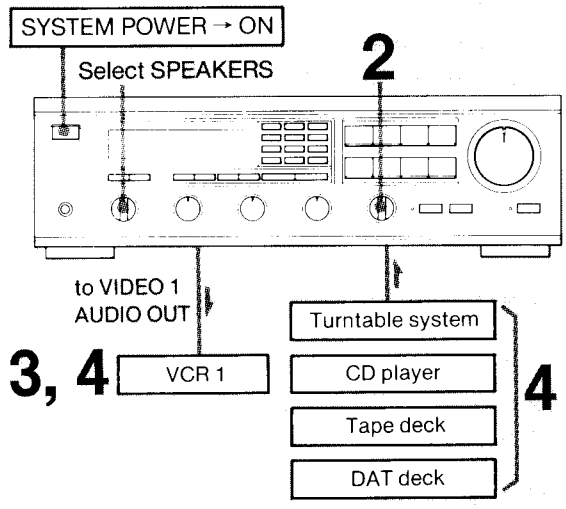
Note on recording
The setting of the volume, BASS or TREBLE controls and BALANCE control do not have any effect on recording.

Note on dubbing
You can dub an audio tape from tape deck 1 to tape deck 2 (or the DAT deck), if you connect tape deck 1 to TAPE IN and tape deck 2 to DAT REC OUT (select TAPE at the step 4 above).

Recording on a VCR

Recording Audio Programs

To record an audio program source on a video tape, proceed as follows:



1 **Turn on the receiver and the equipment to be used.**

2 **Select the desired program source with REC OUT SELECTOR.**

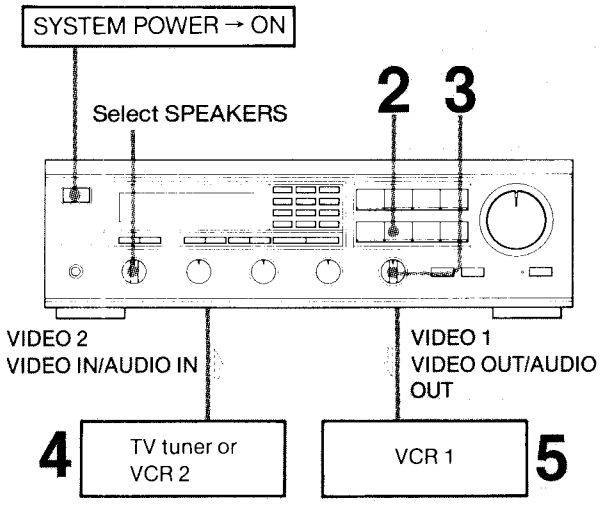
3 **Insert a video tape into the VCR and adjust the recording level.**

4 **Start the program source and set the VCR in the recording mode.**

You can listen to another program source without recording affecting by pressing FUNCTION selector.

Recording TV Programs

To record the picture and the sound of a TV program, proceed as follows:



1 **Turn on the receiver and the equipment to be used.**

2 **Press VIDEO 2/CDV.**

3 **Select VIDEO with REC OUT SELECTOR.**

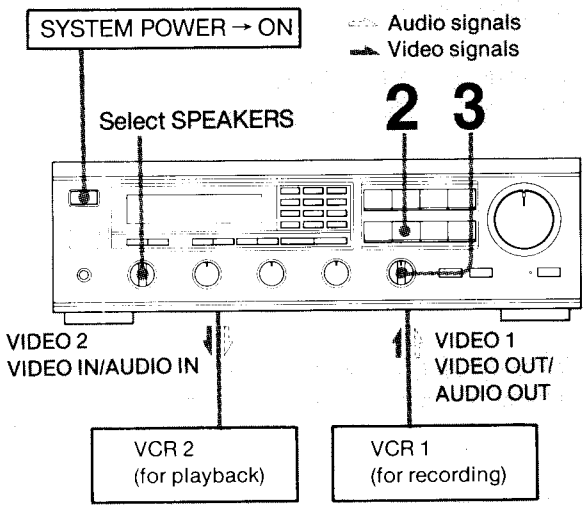
4 **Select the desired program.**

5 **Set the VCR 1 to the recording mode.**

You can listen to another program source without affecting the recording by pressing FUNCTION selector.

Note
You cannot record on a VCR connected to VIDEO 2/CDV or VIDEO 3 (STR-GX7ESII only) inputs.

Video Tape Editing



1 **Turn on the receiver and the equipment to be used.**

2 **Press VIDEO 2/CDV.**

3 **Select VIDEO with REC OUT SELECTOR.**

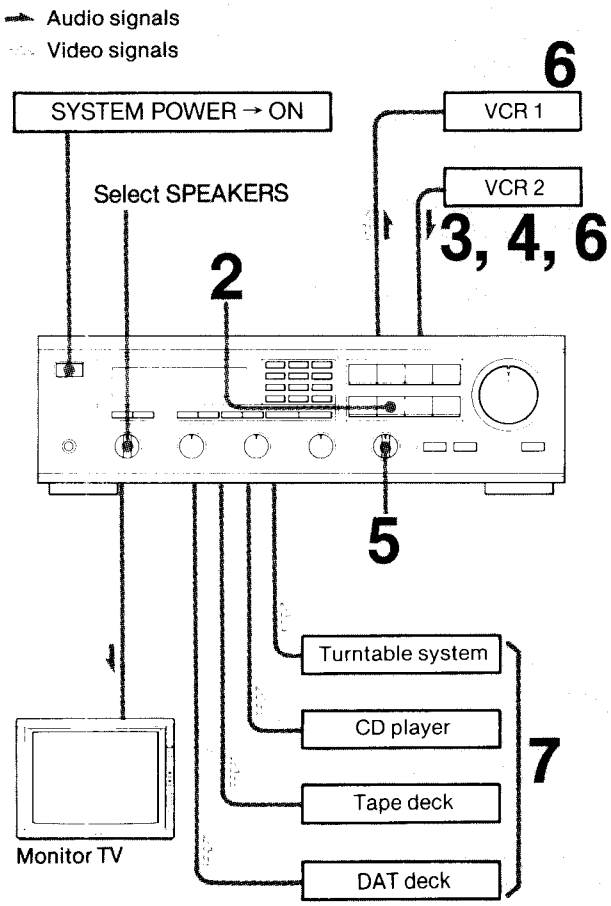
4 **Set VCR 1 in the recording mode.**

5 **Set VCR 2 in the playback mode.**

You can listen to a program source during video tape editing by selecting FUNCTION selectors.

Adding new sound on a video tape during editing

During video tape editing, you can replace the sound previously recorded on a video tape with sound from another audio source, thus making your own personalized video tape.



1 **Turn on the receiver and the equipment to be used.**

2 **Press VIDEO 2/CDV.**

3 **Insert a recorded tape into the VCR 2 and set it in the playback mode.**

4 **At the point where audio dubbing is to start, press the PAUSE button on the VCR 2.**

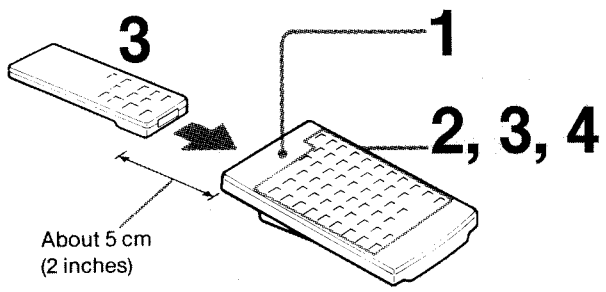
5 **Select the audio program source with REC OUT SELECTOR.**

6 **Release the pause mode of the VCR 2 and set the VCR 1 to the recording mode.**

7 **Start playing the selected program source.**

Note
You cannot edit a video tape from VCR 1 to VCR 2.

How to Use the Learning Function



1 **Set LEARN/USER STD./SONY STD. to LEARN.**
The READY indicator lights up.

2 **Turn this commander towards another commander and press a button to which a function is to be memorized.**
If the selected button is inoperative, the READY indicator flickers.

3 **While keeping the button pressed, press the desired function button on the other commander.**
Begins learning function of the other commander.

4 When the READY indicator goes out and the LEARNED indicator lights up, **release the button.**

Repeat steps 2 to 4 if you want to memorize more functions. After completing the learning function, set the function selector to SONY or USER STD. (See step 1 on "Operating the remote commander".)

When learning is finished
- Set the mode selector to USER STD. to use learned functions.
- Set the mode selector to SONY STD. to use Sony standard functions.

The memorization will be remained for two or three days without installing the batteries.

Caution
Be sure to check if the functions have been stored, because a few of the functions of other manufacturer's commanders are not storable on this commander.

If the RM-P103 cannot control other Sony audio/video equipments
Make it learn functions of the remote commander for each equipment following the above steps. After learning operation, be sure to use it with the mode selector set to USER STD. in this case, too.

If both LEARNED and READY indicators light up
The batteries are becoming exhausted. Replace all four batteries with new ones.

Making the commander learn the recording function

Be sure to press the ◄ or ► button while keeping the ● button pressed. The learning may not be performed if you press ● only.

To activate recording using the learned function, press ◄ or ► while keeping ● pressed.

When the mode selector is set to USER STD.

- Pressing a button on which no function has been learned will always activate the Sony standard function assigned to that button.
- No function will be activated if the pressed button has learned unrelated signals such as noise from fluorescent light.
- The TV/VTR buttons control VCR 2 such as Sony 8 mm VCR, and the TAPE buttons control "B" deck of a Sony double-deck unit.
  For details, refer to the instruction manual of the tape or VCR deck.

Avoiding memorization of noise or useless signals

When using the learning function, be sure to handle both commanders away from a noise source and put the commanders themselves close to each other.

If the READY indicator doesn't light up at step 1 or 4

The learning function will not work well. This may occur when you handle the commanders close to a noise source such as a fluorescent light or an equipment emitting infrared rays.

Remove both commanders away from the noise source.

If the LEARNED indicator flickers at step 3

The RM-P103's memory has been occupied by noise or useless signals to its all capacity.

If this situation occurs, you cannot use the learning function any more before once erasing all contents of the memory.

Erasing the contents of the memory

1. Set the mode selector to LEARN.
2. While keeping the ◄◄ of the VCR buttons pressed, press the MUTING button.

Troubleshooting Guide

Before proceeding through the check list below, examine the connections and the procedures outlined the manual.

Should any problem persist after you have checked the following items, consult your nearest Sony dealer.

	Problem	Cause	Remedy
Amplifier	Sound is not heard.	The speaker or program source equipment is not connected correctly.	Connect the equipment correctly. (See pages 7-13.)
		The correct speakers is not selected with SPEAKERS selector.	Set the SPEAKERS selector correctly.
		The correct FUNCTION selector is not pressed.	Press the correct FUNCTION selector.
		The volume is set to minimum.	Increase the volume.
	One channel does not transmit audio, or the volume from the left and right speakers is unbalanced.	The BALANCE control is not set appropriately.	Adjust the BALANCE control.
		The speaker or program source is not connected correctly.	Connect the equipment correctly. (See pages 7-13.)
	There is an abrupt loss of sound from one or both of the speakers, and the PROTECTOR indication flickers in the display window.	A short-circuit problem activates the protective circuit.	Turn off the receiver, eliminate the short-circuit problem and turn on the power again. If there is no short-circuit, consult your nearest Sony dealer.
	Sound transmitted from the speakers is reversed.	The speakers are not connected correctly.	Connect the right speaker to the R SPEAKER terminals and the left speaker to the L SPEAKER terminals.
	There is lack of bass sound or the instrument position is obscure.	The speakers are not connected correctly.	Connect the speaker with the correct ⊕ ⊖ polarities. (See page 7.)
	Severe hum or noise is heard.	The connecting cords are not of shielded type.	Use shielded type cords.
		A transformer, motor, TV or fluorescent light affects the connecting cord.	Place the connecting cords in a location away from a transformer or motor, and at least 3 meters (10 feet) from a TV set or a fluorescent light.
		The audio components are too close to a TV set.	If both are used at the same time, separate the TV from the audio components.
		The receiver is not grounded.	Connect the ground wire to the antenna ground terminal.
		The connections are loose.	Make secure connections.
		The plugs and jacks are dirty.	Wipe the plugs and jacks with a cloth lightly dampened with alcohol.

Broadcast program	STEREO indicator flickers or does not appear when receiving stereo programs.	A very weak FM station or a noisy FM program is received.	Adjust the antenna or connect an external FM antenna.
			Press the FM MODE button to disengage the stereo mode.
	The desired station cannot be found during Automatic Tuning.	The signal strength is too weak for Automatic Tuning.	Adjust the antenna.
			Tune in the station with the Manual Tuning system. (See page 21.)
	Preset stations cannot be tuned in.	The stations have not been memorized.	Memorize the stations. (See page 22.)
	AM station cannot be tuned in.	The AM tuning interval is set incorrectly.	Change the tuning interval according to the AM frequency allocation system of your country. (See page 21.)
Video program	Picture does not appear.	VCR, TV tuner or TV connection is not correct.	Connect the equipment correctly. (See pages 12-15.)
		The TV is not turned on.	Turn the TV on.
Remote Commander	The remote commander does not operate.	The batteries are exhausted.	Replace the batteries with new ones.
		There is any object between the unit and the commander head.	Remove the object.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8-ohm load, both channels driven, from 20 - 20,000 Hz, rated 100 watts (STR-GX6ESII) or 120 watts (STR-GX7ESII) per channel minimum RMS power, with no more than 0.03% (STR-GX6ESII) or 0.008% (STR-GX7ESII) total harmonic distortion from 250 miliwatts to rated output.

Other Specifications

Amplifier section

Dynamic power output

STR-GX6ESII
140 watts + 140 watts (8 ohms, at 1 kHz IHF)
190 watts + 190 watts (4 ohms, at 1 kHz IHF)
240 watts + 240 watts (2 ohms, at 1 kHz IHF)
STR-GX7ESII
190 watts + 190 watts (8 ohms, at 1 kHz IHF)
250 watts + 250 watts (4 ohms, at 1 kHz IHF)
300 watts + 300 watts (2 ohms, at 1 kHz IHF)

Harmonic distortion

STR-GX6ESII: Less than 0.03% at rated output
STR-GX7ESII: Less than 0.008% at rated output

Frequency response

PHONO: RIAA equalization curve ±0.5 dB
CD,DAT, TAPE, VIDEO (1),2/CDV,3 (AUDIO), ADAPTOR: 5 Hz - 80 kHz $^{+0}_{-1}$ dB

Residual noise: Less than 70μV (8 ohms, network A)

Damping factor: 50 (8 ohms, 1 kHz)

Inputs

	Sensitivity	Impedance	S/N(weighting network, input level)
PHONO	2.5 mV	50 kilohms	87 dB 79 dB* (A, 2.5 mV)
CD VIDEO (1), 2/CDV, 3 TAPE, DAT	150 mV	50 kilohms	105 dB 86 dB* (A, 150 mV)

*'78 IHF

Outputs

VIDEO (1) AUDIO OUT
REC OUT
Voltage 150 mV
Impedance 10 kilohms
SPEAKER A, B
Accepts speakers of 8 - 16 ohms.
HEADPHONES
Accepts low and high impedance headphones.

Tone controls

BASS
±8 dB at 100 Hz
TREBLE
±8 dB at 10 kHz

Muting: −20 dB

Video section

Inputs: VIDEO 1, 2, 3: 1 Vp-p, 75 ohms

Outputs: VIDEO 1, MONITOR: 1 Vp-p, 75 ohms

FM tuner section AM tuner section

	FM tuner section	AM tuner section
Tuning range	87.5 - 108 MHz	530 - 1,610 kHz (with the AM tuning interval set at 10 kHz) 531 - 1,602 kHz (with the AM tuning interval set at 9 kHz)
Antenna terminals	300 ohms, balanced 75 ohms, unbalanced	External antenna terminal, loop antenna
Intermediate frequency	10.7 MHz	450 kHz
Sensitivity at 50 dB quieting	18.3 dBf, 4.5μV (mono) 38.3 dBf, 45μV (stereo)	—
Usable sensitivity	11.2 dBf, 2μV (IHF)	Loop antenna: 50 dB/m (at 1,000 kHz) External antenna: 100μV (at 1,000 kHz)
Signal-to- noise ratio	82 dB (mono) 76 dB (stereo)	54 dB (at 50 mV/m)
Harmonic distortion	0.1% (mono), 0.2% (stereo) at 1 kHz	0.3% (at 50 mV/m, 400 Hz)
Selectivity	60 dB at 400 kHz	40 dB at 10 kHz 35 dB at 9 kHz
Separation	45 dB at 1 kHz	
Frequency response	30 Hz - 15 kHz $^{+0.5}_{-1.5}$ dB	
IM distortion	0.1% (mono) 0.2% (stereo)	
Capture ratio	1.2 dB	
AM suppression ratio	54 dB	
Image response ratio	80 dB	
IF response ratio	90 dB	
Spurious response ratio	100 dB	
RF Intermodulation	65 dB (800 kHz)	
Auto tuning threshold	30 dBf	

General

System
Tuner section: PLL quartz-locked digital synthesizer system
Preamplifier section: low-noise NF type equalizer amp
Power amplifier section: pure-complementary SEPP

Power requirements
120 V AC, 60 Hz

Power consumption
STR-GX6ESII: 170 watts
STR-GX7ESII: 210 watts

AC outlets
Two switched (total 100 watts)

Dimensions
Approx. 430 × 130 × 370 mm (w/h/d) (17 × 5 1/8 × 14 1/2 inches) including projecting parts and controls

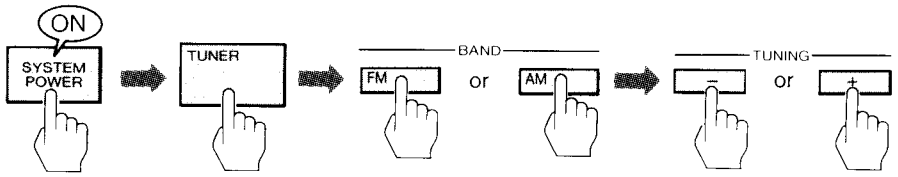
Weight
STR-GX6ESII
: Approx. 7.2 kg (15 lb 14 oz) net
: Approx. 8.8 kg (19 lb 7 oz) shipping carton
STR-GX7ESII
: Approx. 8.2 kg (18 lb 2 oz) net
: Approx. 9.8 kg (21 lb 12 oz) shipping carton

Accessaries supplied
FM ribbon antenna (1)
AM loop antenna (1)
Remote Commander RM-P103 (1)
Sony batteries SUM-3(NS) (for the remote commander) (4)

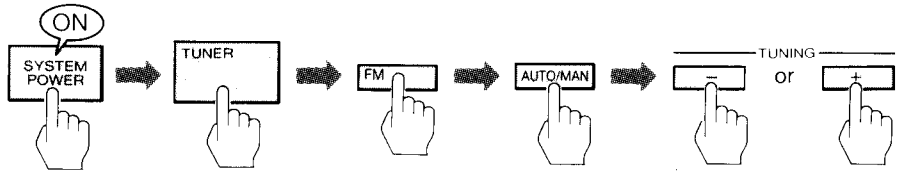
Design and specifications subject to change without notice.

Quick Reference

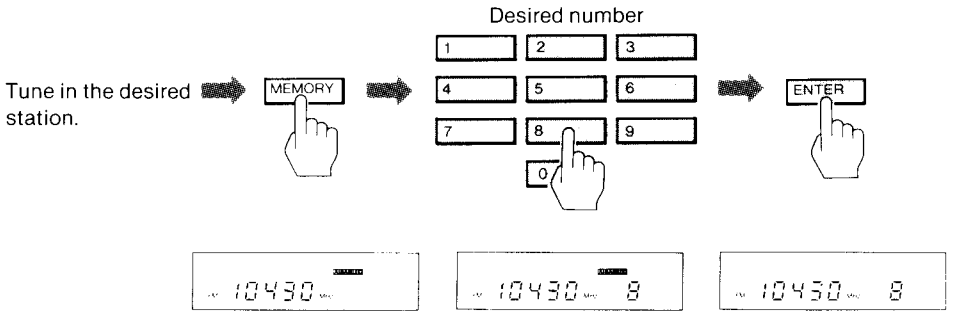
Tuning in an FM/AM station manually



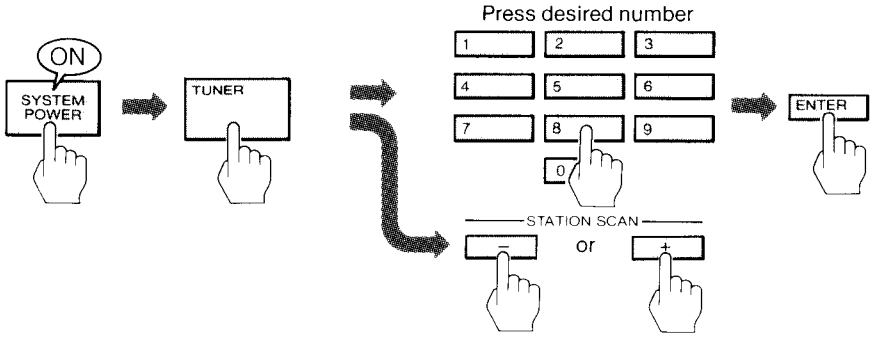
Tuning in an FM station automatically



Memorizing a station



Tuning a preset station



Sony Corporation Printed in Japan